Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 15
Notebook, N-16-05-15.2

This notebook was used by Edison during May-June 1916 for notes on experiments to improve the surface quality of Edison disc records. There are also notes by Archie D. Hoffman. The entries pertain primarily to experiments 1138E to 1188E. Included are tests involving different presses and varnish compounds, variations in the number of coats and methods of applying the varnish, and differing amounts of pressure and baking schedules. Flaws and successful results are both noted. An entry entitled "discarded moulds" provides the number of molds discarded during the week of May 15-20, along with notations about their problems and defects. Additional entries relate to experiments on edging and edging tools, as well as a "special experiment" involving prints of "Gigue" recorded by violinist Albert Spaulding. There are also entries regarding problems with the powder in the record blanks and crooked holes in the blanks, as well as notes on the number of discarded blanks and why they were discarded. Some notes are in the form of instructions to Hoffman. Inserted into the book is one loose note, probably by Hoffman. The front and back covers are labeled "No 15." The pages are unnumbered. Approximately 140 pages have been used.

12	100 %
11	91
10	83
9	75
8	66
7	58
6	50
5	41
4	33
3	25
2	16
1	8

67092
Acme Co.,
STATIONERS,
95 JOHN ST.
AND
19 PLATT ST.
NEW YORK.

In Case of Trouble

Note 1147
second page after 1164
~~1170~~

Edging Experts 12 in Lot

OH_A	OH B_
OK OK	OK OK
OK OK	OK OK
nick in to be redged OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
	OK OK
	OK OK
91%	/13 100%

C Edging	D off Edg	E off.	F off.	G off-	H Fred off	J off	Edged broken Edge + Veneers To 1/4" of music marked places Fred off - test -
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK 1 Mark
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK time nick 1000 in Record	Repoducer Knocked 1/16 sliver out -
OK OK 1/16 nick	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK as far as Edg DISCARD
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	Repoducer broke Sliver out DISCARD
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK veneer in Record	Broke Sliver
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK nick 1/16 in Rec	OK OK
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	Edger Scratched it OK
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	Slivers out OK
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK 1/32 Sliver.
OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	
13	14	13	13	13	13	12	
100%	100%	100%	100%	100%	100%	100%	58%

Can Edge 6 Mandrels hour

1138

Press 41 Load 4

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK slight ck near edge of Veneer

Com OK Veneer

OK OK

OK OK

OK OK

100%

42 Load 9

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK

OK OK Veneer Ck 7" Long

OK OK

OK OK

OK OK

OK OK Veneer Ck 4 + 3 Long

100%

1138 E

Hoffman Edges of 24 152213

blanks

Varnish P

Run Reg

2nd

Duplicate Thus

1139E

Press 41 Load 10

OK OK

T Veneer PO Discard OK

B Veneer PO Discard OK

B Edge – in place Discard OK

OK OK

OK OK

B Com OK Edge V V

T Veneer OK DISCARD

T B Com Com veneer PO

OK OK

OK OK

T Com OK veneer PO

42 – Load 15

OK OK

OK OK

OK OK

T Com OK veneer PO

T Com OK veneer PO

T Com OK veneer Pout

OK OK

T B Veneer " PO DISCARD

T Com OK Veneer PO

OK OK

T Edge bad OK Discard

OK OK

68%

Thus to the 1½ min

where Pull Out looks grey – Don't think it clinches as well as 1 min

1139E

Hoffman

Make Can of 1½ minute Viscosity Varnish 1019

Also Can of 2 min Viscosity,

No advantage in 1½ goes 1 min

Surfaces about same

Most have bad start probably on account of sticking to Edge & Cleaning

Otts Machine so far

is No good

Dont put Varnish on

Even —

1140 E

1 Round varnished in Otts

machine — Rubber brushed

Press #2 Load 1

| Edge — DISCARD
ok
| Veneer DISCARD
ok
Com ok Veneer
| Finger Mark — Good spots Low Var — DISCARD
ok
| Veneer DISCARD
ok
Com ok Veneer
OK ok
Com ok Veneer
Com ok Edge + Veneer
Com ok Edge + Veneer
OK ok
OK ok

66%

1141E

Hoffman to make 2 Rounds of blanks with 2" X $\frac{1}{4}$" washer in Center of the Top plunger, bring to contact Cold + give 500 lbs
then lower + remove washers
+ Run Regular
Then Calliper blanks -

DISCARDED MOULDS 1 WEEK May 15 to 20 1916

Total	359
Dent	38
Crackle	74
Knocks	9
Knocks & Crackles	26
Spitty & Crackles	6
Surface	23
Buckle	50
Bruise	25
Hole	29
Repair Spot	9
Label	7
Run Out	2
Moisture Spot	2
Plating Defect	7
Due to Experiment	10
Porous	9
Scratch	15
Steel in blank	2
Mechanical injury	2
Scrape	1
Stained	2
Tremble	3
Finger Mark	1
Wrinkle	1
Celluloid defect	4
Pin pressed in mould	2

A single Edger now edges
800 Records in 10 hours –
Can possibly edge that
number of blanks if we
find it necessary

1st Round 38-L 1

OK ok Ok dull pt
Com ok Edge
OK ok Dull Eck
Com ok veneer
OK ok Dull ck
OK ok "
OK ok "
OK ok "
OK ok "
OK ok "
Com ok Veneer "
OK ok "

100%

2nd Round 40-L 9

OK ok Dull ck
OK ok "
OK ok Little Low 1
OK ok " Low 3
OK ok " Low 3
OK ok " Low 3
OK ok " Low 3
OK ok "
OK ok " Low 3
OK ok "
Com ok veneer many cracks
OK ok " Low 3

100%

3rd 32 Prem L 13

Com ok veneer 1/8
OK ok
Veneer ok DIS'D
OK ok Low 3
OK ok
OK ok
OK ok
OK ok Low 3
OK ok
Com ok Edge Low 3
Com ok veneer
OK ok
OK ok Low

91%

Paid no attention to Cracks on rounded part

4th 30 Load 11

Com ok veneer 1/32
OK ok Low 3
OK ok
OK ok Low 3
Com Low veneer " 1/32
OK ok Low 3
OK ok
OK ok
Pull O fend line ok DIS
OK ok
OK ok
Veneer Pullout ok DIS

83%

Ditto

1138 E

Duplicated

1/16
3/32

5th Rounds

Prem 36-2

OK ok Low 2+3
OK ok low 3
OK ok
OK ok Low 2+3
OK ok
OK ok low 3
OK ok
Com ok veneer 1/16 low 3
OK ok Low 3
Veneer ok DIS
OK ok
OK ok low 3

91%

Total 93%

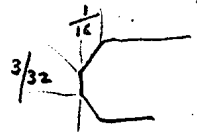
All balled up

Didn't Carry out instructions

Note, not Enough Var at 3 position

1142E

4 Rounds of 1138 blanks
Varnished in O'Ks machine with
velvet wiper—



Print Reg

41-L 13

Edge Crushed DISCD
OK
Edge " DISCD
OK
Veneer DISCD
OK
OK
OK
OK
OK
Edge Cod - DISCD
OK
Small PO at feed DIS
OK
Pull out feed line DIS
OK
OK
Veneer DISCD
OK
Com Veneer
OK
Pull out feed DIS
OK

33%

42-L 8

Veneer DISCD
OK
Pull out feed line DIS
OK
OK
Com Edge
OK
Com Edge
Com "
OK
OK
Veneer DIS
OK
OK
Veneer Ckd into machine DIS
OK
Pull out feed line - DISCD
"
Pull out feed line DIS
OK
Edge DISCD
"
Terrible Edge DIS
OK

41

5-25-16

1143 E

Nothing thicker than 1 min Vis works good with Reg brush by hand

2 Placards

Varnished with 1 Coat

2 hour Bake

1139 E Varnish 1019

2 min Viscosity

Edges not recended

NOTE

With this high Viscosity we get Pull outs on smooth part Edge of blank or at feed line - about 1/32 wide - streak parallel several inches long probably due to impossibility of brushing Evenly with such thick Varnish

1144

OK OK X dull edge of Heads Ckd

Corn OK X

OK OK X dull edge part Ckd

OK X " " "

OK OK X " " "

OK OK X " " "

OK OK veneer X - DISCARD after Edging

OK OK X " " "

OK OK X " " "

OK OK X " " "

OK OK X Veneer 1/3 " "

OK OK X " " "

must be razedged further

100%

X means OK after Edging

41 Press load 7

OK OK veneer at edge 1/64 - many clean

OK OK Dull part Ckd

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

OK OK "

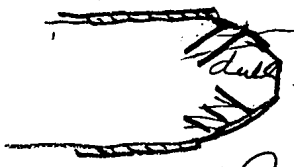
100%

1144 E

Two rounds Varnished to the Edge only - of 5/32 bevelled

Print Reg

Bevelled too much by mistake



Cracked in dull part of bevell -

Round 1

After Edging No cracks show

All OK Except one - veneer pulled off at Edge -

at 2 were not edged in far enough

41—Load 12
Edges on dull allocks

OK OK — brush mark ok

OK OK

Veneer | lung op. 1/16 in So wont Edge — Discard

OK OK

OK OK

OK OK

OK OK — low all around 3

OK OK

OK OK

OK OK

Veneer wont Edge ok 1/16 — Discard

OK OK

83%

42—Load 7

OK OK

OK OK

OK OK

OK OK — Low 3

Cond ok — Veneer Po will edge

OK OK

Veneer will not Edge ok — Discard

OK OK

OK OK

Cond ok — 1/32 Crack in Veneer

OK OK — bad brushing

Veneer will not Clean up ok

83%

1145 E

2 Rounds 5/32 - Varnished way over the Edge -

Present Req —

These are not as good as those only Varnished to Edge

NOTE

gets over Edge + Cracks strains Veneer

Tests of Tracked Moulds 1st 1/2 mach tested

E 344 Surface fair shade RO

4625A "

343E

4587A. Some RO poor surface

101G * fair surface shade RO

3750 B2 * no snaps surface loud quite a R.

312E NG Roughness

326E Start rough then fair back has RO

*) selected — to test surfaces —

1146 E

Time Test
put over Top of Case
in Envelope

One round of 15225 blanks, 1 Coat 1079 Var

Vis 1 min run thru entire factory process ready for Stock room — / Eye tested only —

Tested for surface 5-25 — 16

Surfaces -		Retested July 12
Start smooth but loud	3	
" " Spitty loud	1	
" good-satisfactory	7	
Very good	6	
Very Very good	7	
General Surfaces loud	0	1
" Lumpy but good	6	2
good satisfactory	9	2
Extra good-Very good	5	12
Very Very good	4	7

1147E 2nd Round 42 – 10 Load	3rd Round 41 – Load 1	4th Round 41 – 13 Load	5th Round 42 – 15 Load
OK OK	OK OK	OK OK	OK OK
OK OK Bad low Edge ckd 3	OK OK	OK OK	OK OK
Edge ckd DIS	OK OK	OK OK	OK OK
Blank ckd DIS ½" in	OK OK low 2	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	Very low no primer 3 OK Discard
OK OK	OK OK	OK OK low 3	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	Blank ckd 1" in	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
Low OK Edge ckd	Blank ckd 3/8 in	OK OK	OK OK
	OK OK	OK OK	Blank ckd 1" in
		OK OK	
75%	83%	100%	Mottled Surf 83

1147 = Still not as good as Hand Varnished

Rounded Edge 1522.B

Brushed on Otto machine with Velvet —

Press 41-Load 4 – all released free + OK

OK OK
OK OK
OK OK
OK OK low 3
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK low 3

NEW? S S

Blanks Cracked 5/8 to 1" in 4 cases in 24 records

Average 89.5

Looks like too much chalk + mistake in mixing

100%

Rounded Edges

Rags coming thru factory

Rounded Edge 1522B

38 Press 42	31-46	P-29 Load 15	Press 30 Load 7
OK OK	OK OK May 29	Com OK	OK OK
OK OK May 29	OK OK	Edge OK Veneer DIS	OK OK
OK OK	OK OK	Edge OK Line PO DIS	OK OK May 29
OK OK	OK OK	May 29	OK OK
Com OK veneer	Com OK veneer	OK OK Low 3	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK Low 3	OK OK	Com OK veneer
OK OK	OK OK	OK OK	OK OK
OK OK	Com OK Edge	OK OK	OK OK Dirty Moved Machine
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK Low 3	OK OK Low 3	OK OK
OK OK	OK OK	11	OK OK
Com OK Veneer bumpy OK + VV Edge			
Com 2 100%	Com 2 100%	82%	Com 1 100%
10	8	1 6	10

next page

5th Round May 25 Reqfactory Product Press 40 < 3	May 26 Reqfactory 37 - Load 1	May 26 Reqfactory Product 27 - Load 10	May 26 Reqfactory 35 Load 15
OK	OK	OK	Veneer OK; Ven
OK	OK	OK	OK
OK	OK	OK	OK Low 3
OK	OK	OK	OK
OK	OK	OK	OK Low 3
Com OK Veneer	OK	OK	OK
Com OK Veneer	OK Low 2+3	OK	OK
OK	OK	Com OK Veneer	OK
OK	OK	OK	Com OK Veneer
OK Low 3	OK	OK	3 Swings Low, 1 big OK 2
OK	Com OK Veneer Edge	OK	OK
Com OK Veneer	OK	OK	OK
OK	Veneer OK PO	OK	OK Low 1 Varnishing bad
	Ven. PO OK in house	OK	OK
			OK
Com 3	Com 1	1 Com	1 Com
100%	83%	100%	91%
8	8	Fshers 95% 11	7

May 26 Reqfac 39 - Lot 5	May 27 Reqfac (Reworked) 30 - Lot 13	May 27 Reqfac (Reworked) 36 - Load 12	May 27 Reqfactory 32 - 31
Veneer OK	OK	OK	OK
OK	OK	OK	OK Low 3
OK	OK Low 3	OK	OK
OK	Com OK Crack in Veneer	OK Low 3	OK
Com OK Ven	Com OK Veneer	OK	OK spec in house Bout Seam
Com OK Veneer	OK Low 1 Low 1	OK	OK
Com OK Veneer bad Blank not Rounded	OK	OK	Com OK PO on Label Com fax with Ven
OK	OK	OK	OK Low 3
	OK	OK	OK Low 1 Low 3
Ven OK Blank not Rounded	OK	Com OK Veneer	OK Low 2+3
OK	OK	OK	OK " 2+3
OK	OK Low 3	OK	OK Hook not Centered Sticky
OK	OK	OK	OK
Com OK Veneer			
4 Com			
83%	100%	100%	100%
2 Blanks Not Rounded 91.2 Fshers			C393

1137EA

A

42-Load 11

OK OK

Com OK — Veneer

Com OK — Edge

Com OK — Veneer

OK OK

Com OK — Veneer

OK OK

Com OK — Veneer

OK OK

Com OK — Veneer

OK OK

Com OK — Edge + Veneer

100%

2nd Roomed

41-Load 13

Com OK — Veneer OK

OK OK

OK OK — Veneer OK

Com Com — Veneer

Com OK — Veneer

OK OK

OK OK

OK OK

OK OK

OK OK

Com OK — Veneer

Com OK — Veneer

100%

1137E

Reg 1019 1 min Vis ground once thru the Mill at Newark + marked A + B

41-Load 16 B

Com OK — Veneer

OK OK

OK OK

OK OK

OK OK

OK OK

Com OK — Veneer

OK OK

Com OK — Veneer

OK OK

OK OK

OK OK

Surfaces A+B Same — Dont appear 6z any better than Reg Lamp OK

100%

B Press 42 Load 2

OK OK

OK OK

Com OK — Veneer

OK OK

Veneer + Edge OK DIS

Com OK — Veneer

Com OK — Veneer

OK OK

CRACKED BLANK

OK OK

Com OK — Veneer Edge

OK OK

83%

Special Experiment
with Load _____

This load has one record Tracked to test surfaces –

Also "Gique" a Spaulding record with which is always use. Blanks the face of which is full of steel, The opposite time should also be tested as steel only occurs on one face

In Gique I listened to 3 dupes & there appears to be no snaps in mould surface at start is a little loud but soft & good in music –

The opp side surface not so good its lumpy & start not good –

See next page

No 1 Record 38-Load 9

Surfaces –

Gique
Otherside –
↓
Old Ky Home

Ky No 1 – Surface. Only 2 or 3 light snaps dull – lumpy
Gique 1 snap at interval & 1 after starting 1st point lumpy

Will keep these Records & Cracked Record –
on Rack till I get a Cat –
Ky – had an Eye spot 005 didnt record –

34th Print, Gique same snap at interval + same after start of 2nd point surface lumpy
Old Ky. ||||| light snaps surface lumpy } OK

47th Run no noticeable change – Gique good surface ✓

72 Run Ky Very horrible start – about same snaps in Classic
Gique – about doz more weak snaps none loud – The coating surfaces are about same –

May 27 Factory Records	May 27 Factory Records	29 May 59	29 May Lot 57
36 — 16 Load	28 — 13 Load	31 — Load 10	32 — 2 Load
OK OK	Com OK Edge	Blank Crooked Edge 27/2 long	OK Lines 3
Com OK Edge	OK OK PO feed lines OK	Com Com Veneer	Com OK Veneer
Com OK Veneer Edge	OK OK	Veneer OK Dis	Discard Veneer OK
OK OK	OK OK	OK OK	OK OK
OK OK	PO feed lines OK	OK OK	Veneer OK DISCARD
OK OK	OK OK	Com OK Veneer	Com OK Veneer
OK OK	OK OK	OK OK	Com OK Veneer
OK OK Lines 3	Com OK Veneer	OK OK Dirty alcohol	OK OK
OK OK	OK OK Lines 3	OK OK	OK OK
OK OK	OK OK	OK OK Low load 2	OK OK
OK OK	OK OK	OK OK	Veneer Pull Back OK feed lines DIS
OK OK	OK OK	OK OK	ditto
100%	91%	83%	66%

29 May Lot 17 Press 7 19	29 May Lot 59 38 — 10 Load	29 Lot 18 10 — 24 Load	29 May Lot — Press 3 — Load 18
OK OK	OK OK	OK OK	OK OK
Com OK Veneer	OK OK	OK OK	OK OK
Com OK Veneer	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	Com OK Veneer
PO on Mirror OK DIS	OK OK	OK OK	OK OK
OK OK	Com OK Veneer	OK OK	OK OK
OK OK	OK OK	OK OK	Com OK V
OK OK Swap in mirror	OK OK	OK OK	OK OK
OK OK Lines 2	OK OK	OK OK Lines 2-3 weak	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	PO feed lines OK ✓
	OK OK	OK OK	
91%	100%	100%	91%

Continued | Discard

Reg face May 29 Press 32 - Load 4	May 29 SPECIAL Press 35 Load 2	Reg face May 29 42 Load 12	Reg face May 29 23 Load 8 Pieces
OK OK	Com OK (Edge Cracked)	OK OK	OK OK Loose 2+3
Com OK V	OK OK	OK OK	Com OK PO feed line far from Mark
Com OK V	PO feed lines OK D10	OK OK	OK OK Loose 7
OK OK	OK OK	OK OK	OK OK
PO feed lines OK D15	OK OK	Com OK	Com OK
Com OK Loose 3	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
PO feed lines OK D10	OK OK	OK OK	OK OK Loose 3
Com OK V	OK OK Leg Spot Lock Van 1	Com OK V	Com OK V
OK OK	DISCARD Lock Van at Edge	OK OK	OK OK Loose 3
Com OK	DISCARD Piece steel.	OK OK	OK OK
Com OK Loose 3	OK OK	Com OK	OK OK
	OK OK	OK OK	PO feed lines OK poor, varnish
	Not Reg		
	75%		
83%	Damaged die blanks Carefully shaved by blanksman Otis Machine.	100%	91%

May 29 Reg face 37 - Load 7	May 29 Reg face 37 Load 7	May 29 - Factory Rec 29 - Load 7	29th May Reg Fac Press 8 Load 24
OK OK	OK OK	OK OK	OK OK
OK OK Loose 3	OK OK	OK OK	OK OK Loose 3 allowance
OK OK " 3	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK feed line PO not OK
Com OK V	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
C OK V	OK OK	OK OK	OK OK
Com OK V	OK OK	OK OK	OK OK
OK OK	Com OK	OK OK	OK OK
OK OK	OK OK	Com OK V	OK OK
Com OK (ckd) V	PO feed lines OK both sides	OK OK Loose 3	PO feed line also OK Ckd Van — Van over edges
Blank Cracked	ditto.	OK OK	OK OK Van — Van over Edge —
91%	83%	100%	91%

NOTE

Our Regs 1522B

1 Coat 2 hours

1 Min Vis –

250 times placed

OK Sounds OK + under

Micro Rem hardly detect

any way on hills –

good for 500 or more

1148E

Four rounds using regular

Transfer Terminals 1 minute

Vocoding –

Sheet Reg

8% Line in Check

Eye – Mac + final

72% OK — UPS Trans

~~4 Rounds by me~~ Not using voice up

stairs when

this done

May 29 Press 42 Load 14	May 31. Press 9 Load 27	May 31 Press 6 Load 20	May 31 Press 10 Load 4
OK OK	Conv OK Edge V Small	Conv OK	OK OK
OK OK	OK OK	OK OK Low - 3	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK Low - 3	Conv OK Veneer Crk. [illegible]
OK OK	OK OK	Conv OK	OK OK
OK OK	OK OK	OK OK	OK OK Low - 3
OK OK	OK OK	Dis OK Veneer	OK OK
OK OK	OK OK Low - 3	OK OK	OK OK Low - 3
OK OK Edge V Small	P.O. [illegible] OK Crk. Var.	OK OK Low - 3	OK OK
OK OK	OK OK	OK OK	Conv OK Veneer Pull of Edge
Conv OK Pa-fred lines	OK OK	OK OK Low - 3	/10 Blk.
OK OK	OK OK	Dis crk. Blk. Veneer	100 %
100 -	91 %	83 %	

May 31. Press 10 Road 18 Rot 66	May 31 Press 5 Road 25 Rot 65	May 31 Press 29 Road 6 - Rot 69	May 31 Press 8 Road 27 Rot 66
Conv OK Veneer Pull Edge	Conv OK Veneer	OK OK	OK OK
OK OK	Dis Veneer Pull of Dis Dis	OK OK	OK OK
OK OK	Dis Veneer Crushed Edge OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
Conv OK Veneer	OK OK Low - 3	OK OK	OK OK
OK OK	OK OK	Conv Conv Veneer	OK OK
OK OK	Dis crushed Edge + Veneer OK	OK OK	Dis OK Veneer
OK OK	Conv OK Veneer	OK OK	OK OK
OK OK	Dis Dis crk. Blk.	Dis crk. Edge + Veneer OK	OK OK
OK OK Low - 3	Dis OK Veneer	Dis OK Veneer	OK OK
OK OK	OK OK	Conv OK Veneer	OK OK
Dis OK Veneer	Dis Dis Veneer + Crushed Ed.	OK OK	OK OK Low - 2 - 3
OK OK			
91 %	50 %	83 %	91 %

May 31 Press 9 Road 30 - Rot 69	May 31 Lot 40 31 - Press 36 - 2	May 31 Lot 40 May 31 37 Load 4	May 31 Press 42 Load # 11 Rot 69	May 31 Press 11 Load 18 - Rot 69	May 31 Press 1 Load 17 - Rot 69	May 31 Press 40 Road 8 - Rot 69	June 1 Press 8 Road 28 - Rot 68
OK OK	Veneer OK DIS	Edge Crushed OK DIS	OK OK	OK OK	OK OK	Com OK Veneer	Dis Broken Edge OK
OK OK Dis Pull only original lines OK.	Com OK Veneer	PO Feed lines Veneer	Com OK Veneer	OK OK Dis Veneer	Com OK Veneer	Com OK Veneer	Dis Veneer Com Veneer
OK OK	OK OK	Com OK V	OK OK	OK OK	OK OK	OK OK	Com Veneer
OK OK	OK OK	Com OK Edge	Dis Dis Veneer + Crushed Edge.	OK OK	OK OK	Com OK VENEER	Com Veneer
OK OK	Com OK Edge	Com OK V	Com OK Veneer	Com OK Veneer	Com OK Crushed Edge	Com OK Veneer	Com Com Veneer
OK OK	OK OK	Com OK Veneer	Com OK Veneer	OK OK	Com Com Veneer	OK OK	Dis Broken Edge OK
OK OK	OK OK	Veneer DIS OK	OK OK	Com OK Veneer	OK OK	Com OK Crushed Edge	Com OK Crushed Edge
OK OK	Com OK Veneer	OK OK	Com OK Edge crushed	OK OK	OK OK	Com OK Veneer Edge	Dis Veneer OK
OK OK	Com OK Veneer	OK OK	Dis Dis Veneer Crushed Edge. PO on feed lines	Com OK Veneer	Dis Crushed Edge Dis + Veneer P. Off	Com OK Veneer	Com Com Veneer
Com OK Veneer + Crushed Edge	Com OK Veneer	OK OK	Dis Crushed Edge OK	OK OK	Com OK Veneer	OK OK	OK OK
OK OK	OK OK	Com OK V	OK OK	Com OK Veneer	Com OK Crushed	Com OK Veneer	Com OK. Veneer
OK OK	Com OK Veneer	Com OK	Dis Broken Edge Dis PO misfed lines	OK OK	Dis PO on feed lines OK	OK OK	OK OK
	PO OK feed lines	Com OK					Com OK Veneer
	These two Pounds of Rek Baked 1½ hrs						
91%	83%	75%	66%	91%	83%	100%	66%

1148 Lot 67
Pieces 31 & 4
5-31-16

	31-4 Round	35-Round 4	42-4
Com OK	OK OK		OK OK Var too thick Low — 1 or 3
Edge — V	Com OK V+E	Veneer OK Dis	Com OK
OK OK	OK OK	OK OK	OK OK
OK OK	Com OK Edge V	Com OK Var 3 Low 3	OK OK
OK OK	OK OK	Veneer OK	OK OK
Veneer pulled out Low 2/oot 3	OK OK	OK OK Low 1	Com OK Edge
Com OK V Veneer	OK OK	OK OK	OK OK
OK OK Sweep	OK OK	OK OK	OK OK
OK OK Low 3	Com OK	OK OK	Com OK Var 4
Com OK V+E	Veneer OK Dis PO Veneer	OK OK	Com OK Edge
Veneer OK V+E	Com OK V Veneer	OK OK	OK OK
OK OK Low 3	Com OK V	OK OK	OK OK
OK OK	Veneer OK Dis	Edge OK — Dis	Veneer OK Dis
83%	83%	75%	91%

83%

1148 E

Four rounds using regular transfer Var 1 mix Viscosity no Lampblack —

NOTE

Prints dont look as even + velvety as with Lampblack ?

The Varnish seems too thick some fry out on Edges —
This is because no Lampblack which increases Vis + this having none the Vis was got up by using thicker Varnish —

1149 E June 1	June 1	June 1	June 1
Press 39 hand 10	Press 4	Press 30	Press 35
Lot 72	Brad 10 Lot 72	Brad 10 - Lot 72	Brad 10 - Lot 72
OK OK Rev - 3	OK OK	OK OK	OK OK
Conc OK Rev - 3	Conc OK V. cracked	Conc OK crushed edge	OK OK Rev - 3
Dis Bad Paw Label OK	Conc OK	Conc OK crushed edge	Conc OK
OK OK	Conc OK Rev - 3	Conc OK	Conc OK
OK OK Rev - 3 Rev - 3	Dis OK VENEER Rev - 3	OK OK Rev - 3	Conc OK V. crk.
Conc OK	OK OK	Conc OK crushed edge	OK OK
OK OK	Conc OK	OK OK	Conc OK V. crk. Rev - 3
OK OK Rev - 3 Rev - 3	Conc OK Po on Label Rev - 3	OK OK Rev - 3	OK OK Rev - 3
OK OK Rev - 3 Rev - 3	OK OK	Conc OK Po on Label	OK OK
Dis OK	Conc OK	Conc OK V. crk.	OK OK Rev - 3 Rev - 3
OK OK	Conc OK Rev - 3	OK OK	OK OK
OK OK Rev - 3	OK OK Rev - 3 Rev - 3	Dis OK	
	Dis OK VENEER crk.		
83 %	83 %	91 %	100 %

1149 E

Hoffman Make a little jag of varnish — Regular transfer varnish — no lamplight viscosity. 1/2 a minute 4 Rounds

5000 — Prints. 5-31-16

Rejects to Baldwin

Veneer	640
Edges	130
Rough Spots	104
Snaps.	121
Cracked	63
Low Spots	4
Wrong Comb'n	25
Scratches	6
Chipped	3

Nature of Trouble

More even blank so it will not squirt out so much & Crush blank well more than 1/2 the demands

Reasons why Holes are Crooked in Blanks

1st.

If hole in mould holder plates are not tapped straight

2nd

If the hole in the bushing is not straight with the hole

3rd

Mould holder lock pins shift moulds -

4th

Platens on press do not come up square

5th

Wedge shaped blanks

Cane / Pierro Rodar - 8/ 65	Jane / Piero.						
OK OK							
OK OK Pom - 3							
OK OK							
Pom OK							
OK OK							
Pom Pomlab OK							
OK OK Pom 3							
Mr. Barbolan OK							
OK OK							
OK OK							
Mr. Pomplitz OK							
OK OK							
83 %.							

1150 E

Press 42 Load 17

OK OK

OK OK — Venus

OK OK — V

OK OK — V

OK OK — V

OK OK — V

OK OK

OK OK

OK OK — Low — 3

OK OK

OK OK

OK OK

100%

Press 41 Load 11

OK OK

OK OK

OK OK — V

OK OK — V

OK OK

OK OK

OK OK

OK OK

Com OK — Venus

OK OK

OK OK

OK OK

100%

1150 E

2 Rounds varnished on Otto Mac by hand Table Turning at Constant speed, Revolutions 114 per min

One Coat regular way 2 hour Bake

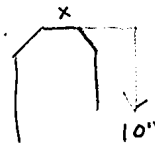
Print Req

This looks good probably more certain than turning by hand

Note -

An edged or rather bevelled

Overlay in Printing at X.



10" Second $\frac{1}{32}$ - To

$10\frac{1}{32}$ $10\frac{3}{16}$ $10\,3/64$ $10\frac{1}{32}$ $10\,3/64$

$10\frac{1}{64}$ $10\frac{1}{32}$ $10\,3/64$ $10\,3/64$ $10\,3/64$

Fred Otto - Experiment

B = Benzol with 3% beeswax by weight rubbed on Margin of Monigo - Not wiped off - put on up to feed line -

B -

OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

C = Benzol + Castor Oil
3% C Oil -

OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

The drummond shows grooves on smooth part near + to feed lines - will run wear test -

First time was surface on smooth rather hard - 2nd time much better 4th time surface very soft + good -

Low 3rd position

Later Adopted this + it at first went good then finally it didn't do any good at all or very little -

100% + perfect extra -

100% perfect,

1151 E Load 11 - Press 42

OK OK

OK OK — V

OK OK Low — Positive

OK OK

OK OK

OK OK Lower

OK OK Low — 3

OK OK

OK OK

OK OK

OK OK

OK OK — ck

100%

1151 E

Soft spot blanks — spots that show up in tumbling very matte which on cutting with knife are shown to be very soft compared to good part.

This is strange

1152 Prem 38 Load 17 Lot 75	June 1 Prem 39 Load 5 Lot 75	June 1 Prem 35 Load 11 Lot 75	June 1 Prem 58 Load 8 Lot 75
OK OK	OK OK	OK OK	Com OK — Crushed Edge
OK OK	Com OK — V	OK OK Sev - 3	Com OK — Slip Edge
Com OK Edge	Dis OK — VENEER	OK OK	Com OK — VENEER
OK OK	OK OK	OK OK Sev - 3 Sev - 2	Com Com — VENEER CK
OK OK	Com OK — VENEER	OK OK Sev - 1-½	OK OK
Veneer OK	OK OK	OK OK Sev - 3	Dis P.O. ruled lines OK
OK OK	OK OK	OK OK	
OK OK CK	OK OK Sev - 3	Com OK — CK	Com OK — VENEER
OK OK	Com OK — VENEER	OK OK	OK OK
Com OK Edge	OK OK	OK OK Sev - 3	Dis OK — VENEER CK
Com OK SK	OK OK	Com OK — CK	Com OK — VENEER
Com OK	Com OK — CK	OK OK	OK OK
			Com OK — Crushed Edge
91%	91%	100%	83%

1152

NOTE

4 Rounds —

Edges of moulds rubbed with the Vaseline solution of Castor Oil 3% — but only to within ¼ of each of music Fred will finish the job —

Prem Req 1522B

schedule

Note $\frac{1}{16}$" of Solution not Enough

$\frac{91}{83}$ 100 4 | 367 91.5

91.5 Average

1153

4 Rounds $\frac{1}{8}$ felt pad used to put Otto "C" solution on Edges of Mould

Lot 76 42-Load 6 1154E	Lot 75 Press 30 Load 8	Lot 75 P 41 Load 10	P 40 Load 17 Lot 75
OK OK	OK OK — V	OK OK	OK OK — V + Edge
OK OK	OK OK	Com OK — V	Com OK — Edge + Vin
OK OK	OK OK	OK OK	Com OK — V
OK OK	Com OK — V	OK OK	OK OK — V
OK OK	OK OK	OK OK	OK OK — V
OK OK — P.O.V only one	OK OK	OK OK	OK OK — Oil holes margin Too much oil
Com OK — Edge	OK OK — CK	Com OK — V	Com OK — Edge + Vin
Label ok	OK OK — oil near Label.	Com OK — V	Com OK — E + Vin — Edge
OK OK	OK OK	OK OK	Veneer ok — DIS
Com OK — V	OK OK	OK OK — Drop C sol music. wall pa - ok	OK OK
Com OK — V	OK OK	OK OK	OK OK
Com OK	OK OK	OK OK	OK OK — CKd
91%	100	100%	91%

1154E

378 — 2
756 —

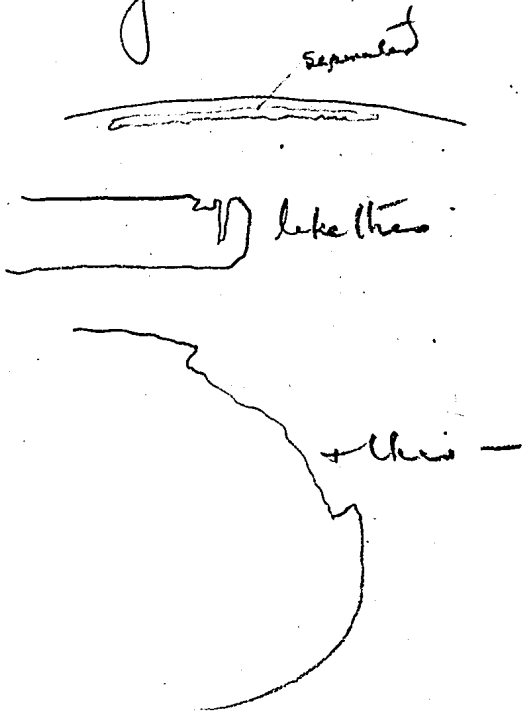
4 Rounds — 3/16 felt pad used to put OTTo "C" solution around Edge of Mounds

C813

Moulds as they are (now) are

1155 better than (padded slight) moulds —

Padded Moulds makes things worse



1155 E

X is padded Moulds —

Records from padded Moulds —

X	Edges This Moulded		
X	OK OK		
X	OK OK		
X	OK OK		
X	Com Com	Edges bad	
X	Com "	Edges bad	
X	Com "	Edge bad	
X	OK OK	Row 3	

Rotten

Press 41 L6 1156 E	38 Press Load 11	40 Load 4	37 Load 24	36 - Load 2
OK	OK	Com ok Edge + V	OK	OK
OK	Com ok Edge	OK	Com ok V	Veneer ok DIS
Com ok Bond Edge	OK	OK	Com ok Bond	both Edge DIS
OK	Com ok Edge	OK	OK	Com ok Veneer + Edge
Com ok Edge	OK	OK	OK	Edge DIS
Com ok Edge	OK	OK	OK	OK V
OK	OK	OK	Com ok Ven	OK
OK	OK Ven	OK	OK	Com ok Edge bad
Com ok Bond Edge	OK	Edge ok	OK	Com ok Edge bad
Veneer ok Edge	OK	OK	OK	OK
OK	Edge bad	Com ok Veneer + V Edge	Com ok Edge	OK
OK	Com ok Ven	Com ok V	Com ok Edge	Com ok V
	OK	Com ok Edge	OK	OK
91%	91%	91%	100%	75%

1156 E

1156 E

Hoffman

Make a bunch of pocoder + dont go above 150 deg Fahr in Vacuum hold there ½ hour not yet dump + take out + make 8 Rounds of blanks to run req Hum frequency on this number if OK & will let you know

31 Load 8	Load 13 P 39
Veneer ok DIS	Veneer ok DIS
OK	Veneer ok DIS
Veneer ok DIS	OK
Com ok V	Com ok V
Potential DIS	Com ok V
OK	OK
Com ok Veneer E	OK
Veneer ok DIS	OK
Com ok V	OK
Veneer ok DIS	OK
OK	Com ok V20
Com ok V	OK Core Ven
	Com ok V + Edge
58%	83%

Blank Schedule Reg 15223

Reg Shedule on 1522B Blank

Bring to Contact 100 lbs -
Hold 5 minutes - 100 lbs
Steam —
Then run to 600 lbs. Hold
for 3 minutes Cool -

Press

1157 2nd Round | Press 29 Load 8

Blank Cracked

OK OK

OK OK

OK OK - Latex PO

OK OK

OK OK

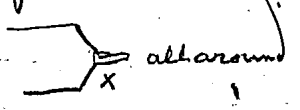
OK OK

OK OK

OK OK

Broken Blank.

Peculiarity of this
blank is that Edges
Squeeze out thus



1157E

Hoffman 2 Rounds
blanks -
Bring to Contact, put on
Steam hold for 2 minutes
then put on 600 lbs pressure
for ~~2~~ 1 minute - Cool

1157 Press 40 load 12

Veneer Dis
ok
Veneer Dis
bad

OK OK

Comm OK Veneer

OK OK

OK OK

OK OK

OK OK

OK OK

PO OK feathers

OK OK

Comm OK Veneer

Veneer Dis -
ok

Veneer don't seem to go into blank & clinch well -

Note Surfaces
are very good
considering the soft
thick blank -

Ethyl Alcohol

Boiling Point Fahr

BP	Vac
52	29 mches
72.2	28 "
94	26 "
118	22.1 "
133.5	18.2 "
145	14.3
154	10.3
162.3	6.4
169	2.4
172	0

Water

BP Fahr	Vac
32	29.82
50	29.64
68.2	29 32
86	28.76
104	27.84
122	26.38
140	24.13
158	20.83
176	16 00
194	9.30
210	0

1158- 42-Loads

Com OK Edges, squashed bad - center most,

Veneer pulled to music - blank thin - Center of blank flowed to our Edge -

Com OK veneer Blank flowed to Edge at Center

Blank flowed badly to Edge, finished above

" " " " "

" " " " "

Com OK " " " " " Cracked,

" " " " " crushed Edge

Com OK " " " "

Com OK " " " "

" " " " Edge + Veneer PO

OK OK flowed to Edge

All these flowed up to bevel ring on moulds + into space between,
These are rag blanks, The question is Why did these blanks flow so much

1158 E

Hoffman Make 1522 B Blanks
2 Rounds
Bring to Contact ~~for 2 times~~
put steam on hold 2 minutes
then put on 600 LBS pressure
for 2 minutes, Cool -

~~Bad 8 spaces~~

OK OK flowed to Taper + between,

OK OK " " "

DIS " "

DIS Blank Cracked

OK OK flowed to taper on mould + in between,

OK OK Didnt flow between,

OK OK flowed 1/2 around into space bet moulds.

Com OK — flowed considerably

Com OK — Edge — didnt flow in + between,

Blank Cracked

OK — flowed between moulds

Dis - flowed bet moulds

1159
Loaded 13. Press 32

Acts same as
1158E
NG

1159E

Hoffman
Make 2 Rounds of 1522B
blanks – Schedule: Put on
steam and raise pressure at
once to 600 lbs for 2 minutes
Cool –

Print by regular 1522B
Schedule

1160 E

No – poor print all over, stuck to mandrel
not filled in end mandrel or point of label.
ok
Low spots 2 or 3
" " 2 or 3
Loose spots all over 1 2 or 3
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "

Edges filled
now flow

very

ok
"
"
"

No flow to Edges – nearly every one poor print all over but ~~most~~ all of the 3/8 smooth start ok –

It appears that 850 lbs at lower temp of 10 lbs is not enough to make a full print.

1160 E

Two rounds 1522B blanks
Use regular Schedule but
do not let the steam go above
10 pounds pressure – you can
probably do this by manipulating
the Valve & watching it closely

2nd Round of 1161 - Man made a Dup

OK OK Edge not flowed

Dis-Veneer OK — bad surface probably Penchowed Veu - Not flowed

OK OK flowed slightly -

Blank Cracked in 3/8

OK OK flowed slightly — X

Com OK Edge

Blank Cracked - flowed,

OK OK flowed some at X

Veneer Dis blank flowed bad + part into space between Mould

Dis Veu - blanked flowed, at X much

Blank Cracked 1/4 in -

Veneer Dis - blank flowed bad + in between Mould

Note Cracked blank in these Experiments -

1161 E Blanks

Bevelled from feed line 8@.009 both sides

Print one Round of this

Reg Schedule -
Press 39

1161 -

Com OK — Very little change to Edges

OK OK - no change of Edges or slight -

OK OK " " "

OK OK slight change Edge

OK OK no change of Edge -

Dis - Veneer — Edge very little flow

OK OK - no flow to Edge

Blank Cracked

Com OK — Edge not flowed

OK OK no flow of Edges

OK OK no flow "

OK OK no flow of "

All filled Edge + all

83 a/o

1162 -

OK OK — perfect Edges

OK OK — no edge flow

OK OK — Some flow little -

OK OK — " "

OK OK — " "

OK OK — no flow

OK OK — This blank squirted ~~bad edges~~ & not undiluted like most of them showing there is certainly a difference in the blanks

OK Elbow — × — otherwise Edge undiluted no flow even at × must have stuck

OK OK — nearly perfect Edge

DIS — blank squirted out bad all around note Ulcal Varnish way over Edges

OK OK — perfect Edges -

OK OK — perfect "

Come OK — venus Po — Edges swelled not perfect

OK OK — Edges swelled some - fine long Tubular Venus long Crack

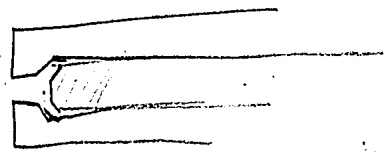
OK OK — Edges nearly perfect, too much wide

OK OK — " "

OK OK — Very fine Po — chipped 1/2 way around

1162E

One mould 2 Tunes with Edges backed off 005, ok (ask Clancy) so it punches blank last



The 1st record that was printed Came out perfect no swell at Edge at all, just as originally bevelled

The surfaces are extremely fine soft velvet,

Were these 2 Tunes discarded - If so they were discarded because they judged by Unwashed blanks - Piano has 1 snap

The only Explanation is that the main area of record presses down 015" + then a little further + fills the outer edge without swelling blank

This is mechanically Very Perfect,

NOTE

1163E NOTE

The bevel starts from Mensic feed line + tapers gradually + Evenly to the Edge 007 to 0075

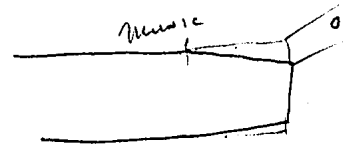
The two sides making 14 to 015" less Caliper than the main blank

It is astonishing that the outer rim of the record is fully pressed + Veneer firmly clinched, The

X Edge X being flat except 1 very slightly rounded

1163E

One round Blanks 0075" scraped



1163 Load N Press 41

OK OK
OK OK
OK OK
OK OK
OK OK Low 3
OK OK Edges swelled just a little
OK OK
OK OK
OK OK
OK OK
OK OK Low 2nd
OK OK

Outer edge perfect + filled

100%

Caliper of blanks 220 to 235 40 + as high as 250 —

Whole Records Calliper 215½ 205 to 235 —

Showing 015 margin — to fill the taper providing Schedule on Blank presses are to keep constant product —

(101)

1164-E

Load 6
Press 36.

OK OK	OK OK
OK OK	OK OK
Com OK	OK OK
Com OK Edge	Dis Edges
Com OK	Com OK Edge
Com OK	Com OK
Com OK Edge	OK OK
Com OK	OK OK
Oil Dis	OK OK
Com OK	OK OK
Com OK	Com OK Edge broken
Com OK Edge	OK OK Loose
Very OK	OK OK

83 1/2 91

Deduct lead

1164 E

Hoffman

Make blanks 1522 B

Req with req schedule

Except hold at 600 lbs

for 8 minutes 100 lbs clamp

We have set the Pacific blank presses at 600 lbs at the accumulator & no more can get on

Also Print presses at 850 no more can get on.—
this Eliminates the judgement of the Press Operator —

850 lbs is different for cellulose they want to stay on the 850 line so we lined presses at 850 line & found cellulose is ok & averages well on Condensate so from 4th adopted it & allow on 850 Press Line—

Notes — 3rd June 1916 —

Shortened time under 600 lbs pressure in blank presses make a thicker blank. $\frac{1}{32}$ This blank when permitted flows very much going up against bevels on rings of moulds & the center of the blank flows into the space between the moulds No veneer will stand this hence low OK percent.

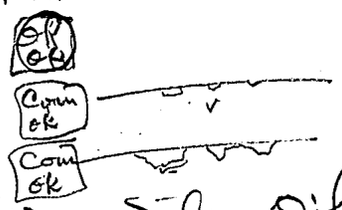
In Printing if the schedule is regular 850 lb 12 min at 120 lbs steam the print fills always — BUT if same schedule is used but steam kept at 10 lbs pressure by valve, every one is a poor print it dont fill — The 3/8 slant however fills — & seems generally good & if there was a fill it would give 100%

This shows the blank dont soften enough at 10 lbs steam temp to fill —

Round Oil pads instead of square

1 Veneer Discard –

1 Oil – DISCARD for oil wide round



1 Discard for Oil –

1 Discard Veneer

66% Round Pad NG

Fred Otto Beeswax - Square

Chamois Stick — 3 s/s Beeswax in Kegs

B3 Prev 140 load 1

PO on feed line - OK

OK OK

OK OK low 1

OK OK

OK OK PO on label

OK OK very fine

Com OK Edges — flow much

OK OK

OK OK PO feed line o.k. but fan from music

Com OK — CK

OK OK

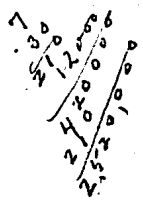
OK OK

91 s/s

NOTE ~~April~~ June 6/1911

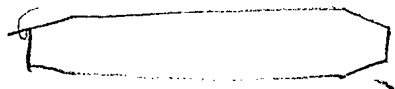
3% Beeswax in Benzol is standard now for Edges until further notice

HH 11



1165 E

Blanks made in hollow bottom & Top mould to produce a Taper blank at Edges



Hoffman to make round after round till it prevented out

Load 24 Press 41

OK OK noflow	OK OK ok noflow
OK OK "	OK OK noflow
OK OK "	OK OK noflow.
OK OK " Po rw lated. very small.	OK OK noflow
OK OK "	
OK OK "	
OK OK "	
OK OK "	

100% pass
83% perfect.=

Load 10 press 41 by mistake next Bevelled

OK OK ck'd V	OK OK c(d) V
OK OK	OK OK
OK OK ck'd V	
OK OK	
OK OK c(d) V	
OK OK c(d) V	
OK OK	
OK OK c(d)	
OK OK Edge	
OK OK c(d)	

100%

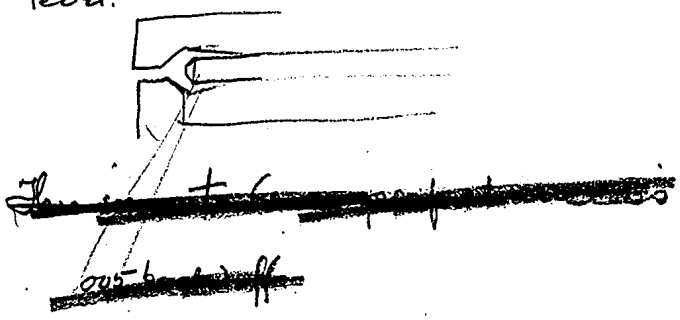
33% perfect

C(11)

		Lot 23 press 40	Lot 23 press 31
No Flow To Blank			
OK OK Edge flat	OK OK Edge Flat no flow	OK OK no flow	OK OK flow some 1st.
OK OK "	OK OK "	OK OK "	OK OK " allowed
OK OK "	OK OK "	OK OK " wyn Mech	OK OK no flow
OK OK "	OK OK "	OK OK	OK OK flow one time all around other not,
OK OK "	OK OK "	OK OK flowed some	
OK OK "	OK OK "	OK OK no flow	OK OK Bad Edging one side X
OK OK "	OK OK "	OK OK "	OK OK flowed some
OK OK shade round	OK OK one 2 edge flowed To angle	OK OK "	line of blacks apears on center of rim 1/2 way flowed
OK OK Edge flat	OK OK Edge flat no flow	OK OK " B	OK OK
OK OK "	OK OK "	8	8
OK OK "	OK OK "		
OK OK " Low 3	OK OK "		
100%	100%	100%	75%
Fine	"		
Best yet.			
Perfect 100	100%	100%	75%

1166 E.

Prints from new load of moulds turned off s.o. .005 on side only of level.



X note push off of Sheet due to bad Edging of angle —

B note — blacks apears

Blacks Spaces Either bad Vacuuming or dirt, or oil —

1167

Com OK — OK flowed to bevels -

OK OK ½ flow to bevels + bottom

OK OK Edges flat - no flow

OK OK flowed to bevels, not bottom flat

cracked — It was not filled V. looks thin ft. flowed a little on one side

OK OK mould scratched, Edge flat.

OK OK flowed some at this point

OK OK Edge flat - no flow

OK OK " "

OK OK " Not pressure enough on Edge at Edge -

OK OK flow 1/3 of Edge.

OK OK no flow

91%

015 Little too much with 200° Fahr -

OK OK no flow

Cracked — no flow, didnt fill at Edges

OK OK no flow

OK OK no flow

Some flow - silver Spots W.V.

OK Very Van at Edge, flowed bad

OK — didnt fill at Edge where cracks are

OK OK

OK OK some flow one Edge

OK OK no flow -

OK — flow where cracked

OK OK flowed some

OK OK no flow -

66%

All but one Edge filled. (where radial cracks) the fill was bad looked as if very much thin

1167E

15223

Beveled blanks — 007 @ 0075 outside — Total 015 —

Two rounds

Present Reg

NOTE

0075 is too much

0045 to 005 on moulds is about right

5th Round 1166.E Lot 23 Press 29	6th 23 - Press 26	23 - Press 29	23 - 35P
OK OK No flow	OK OK ½ some flow	smudge line OK near inside Flowed	OK OK flowed considerable
OK OK "	OK OK smear line near inside	OK OK no flow	OK OK no flow
OK OK "	OK OK No flow	OK OK very light smudge line No flow	OK OK "
OK OK ½ some flow	OK OK "	OK OK ½ some flow	OK OK Some flow
OK OK No flow	OK OK shade flow	OK OK slight smudge line some flow	OK OK No flow
OK OK no flow	OK OK ½ "	OK OK Slight flow	OK OK flowed some
OK OK ½ some flow	OK OK "	OK OK no flow	OK OK no flow
OK OK flowed to Angle	OK OK ½ to Temper	OK OK "	OK OK no flow
OK OK "	OK OK no flow	OK OK Poor edge	PO OK fine at feed line on outboard
OK OK "	OK OK 3/4 To Bevel	OK OK Light smudge line near feed line	OK OK Venees (big) Dis
10	10	10	10
100%	100%	90%	80%
Perfect 90%	91%	50%	80%

1166E Continued —

23 - 40 Press	Load 23 - 41 Pb Lot 102	23 Load 005 backed off
OK OK ½ flowed	OK OK smudge	
OK OK to angle	OK OK smudge	
OK OK ½ flow smudge line	OK OK no flow	
OK OK no flow	OK OK no flow	
Dis - flowed but not to bevel bad Edge + Vee both sides	OK OK no flow	
OK OK No flow	Blank Ckd	
OK OK flow to bevel + underneath	OK OK	
OK OK no flow saw edge +	OK OK ¼ flow	
OK OK flowed	DISCARD flow ½ flow ½ flow	
OK OK no flow	OK OK No flow	
OK OK flowed to Bev + underneath		
OK OK flowed ½		
91%	66%	
33%	16%	

1165 E Beveled Mould to give beveled BLANK
Continued Load 29 P 41
2nd Round

NF = No flow

OK OK no flow X	OK OK no flow CKD	OK OK Some flow 1/2 to Gauge CK	OK OK no flow CK	OK OK no flow X	OK OK NF CKD
OK OK no flow X	OK OK Some flow X	OK OK no flow X	OK OK no flow CKD	Pom music OK no flow	OK OK NF CK
OK OK no flow X	OK OK no flow X	OK OK no flow CK	OK OK no flow V	OK OK no F CKD	OK OK NF X
OK OK no flow X	OK OK no flow X	OK OK no flow V	OK OK no flow X	OK OK NF X	OK OK NF X
OK OK no flow X	OK OK " X	Corn Corn no flow Edge	OK OK " X	OK OK NF CK	OK OK NF X
OK OK slight flow X	OK OK " X	OK OK no flow CK	OK OK slight flow V	OK OK NF CK	OK OK NF V
OK OK no flow X	OK OK " X	OK OK no flow X	OK OK no flow CK	OK OK NF CK	OK OK NF Edge
OK OK no flow X	OK OK 1/3 flow X	OK OK no flow X	OK OK no flow CK	OK OK NF X	OK OK NF CK
OK OK large flow VEW	DISCARD CKD BLNK	Blank Cracked	OK OK no flow X	Edge Crushed OK	Venus OK NO F. V
OK OK no flow CKD	OK OK no flow - X	OK OK no flow X	OK OK " CK	Edge Crushed OK CKD Venus	OK OK NF Film Pol X
OK OK Bad Edge no flow CKD	OK OK " X	OK OK no flow	Corn OK CK	Corn " Crushed Edge Cod	OK OK NF V
OK OK Flowed CKD Bad Edge	OK OK " X	OK OK no flow X	Cracks OK DIS		OK OK NF CK
			OK OK no flow CK		
100%	91%	91%	91%	75	91%
Perfect 66%	83%	41%	25%	25%	33

Very close inspection

C121J

OK OK — CK	Discard PO Veneer big.	Blank Cracked
OK OK — V	Blank Crushed	Com OK — Edge
OK OK Veneer — DIS	Com OK — Edge Crushed	OK OK — PO CK
OK OK Blank Crushed	Blank Crushed.	Com Com — Edge
OK OK — X	Com OK — Edge	Com OK — CK
OK OK Com OK — CK Lack of adhesion	OK OK — CK	Discard Crushed Edge
OK OK Crushed blank	OK OK — CK	OK OK
OK OK " "	Blank Crushed	Com OK — CK
OK OK DIS — CK	OK OK — CK	Com OK — V
OK OK Crushed blank	Com OK — Edge	DIS Crushed Edge
OK OK Crushed blank	OK OK — V	OK OK — CK
OK OK Com OK — Edge	OK OK — CK	Cracked blank
41%	66	
8% perfect.	None perfect	

all Veneer

1168E

Varnished blanks which have been baked between high Tins on record racks —

8 Rounds

Evidently these racks will not do any Alcohol left in @ cans to be Bad — Must have go circulation around Each blank in Drying oven

Edging Tools Multiple Edger

Hours Run June 6th 1916

25.5
22.5
8.5
19.2
21.2
4.5
29.2
16.7
38.7
23.2
5.2
23.2
23.2

20 Hours & 4 minutes average

1169 E

OK OK 1/3 flow -

OK OK 1/5 flow ven

OK OK 1/4 flow ck

Corr OK 1/4 flow Maybe DIS

OK OK no flow ck

OK OK no flow ck

Dis Cracked

OK OK only flow in Center

OK OK no flow -

OK OK Center flowed ven

OK OK ven

OK OK no flow ck allowed

OK OK no flow - ck

OK OK flowed ck

OK OK no flow

OK OK some Center flow X

OK OK no flow ck

OK OK no flow X

OK OK " X

OK OK some flow 1/2 X

OK OK no flow ck

OK OK no flow X

OK OK no flow ck

OK OK center rounded flow ck

91%

perfect 16%

100%

41% perfect,

1169E

2 Rounds.

Note change in schedule

Bring to Contact needle just off pin - When Thermometer reaches 220 degrees; put on 850 lbs pressure for 12 Minutes.

Cool Cold

1170E 1st Round Load 17 P 24	Load 3 42 Pkg.	Debut Test new pacing and others		
Blank CK II	Blank CK II			
Edge Crushed	Veneer off 5			
Edge Crushed	Edge Crushed			
" Cracked	" "			
" Crushed	" "			
" Crushed	Coin " "			
" separated	Coin Veneer			
" Crushed	Crushed Edge			
" "	Coin " " "			
" "	" "			
" "	" "			
OK OK	" "			
	" "			
8%	25%			
Perfect none	perfect none			

1170E

Hoffman Made a bunch of Jacoder with 4-3-4 $\frac{8}{10}$ lbs Lac instead of 4-3-4 1 lbs

Want 500 blanks —

Print Reg schedule —

This looks as if defacing of Shellac is cause of Crushed Edges + defects at Edge generally. 8/10ths is not Enough wants 1 $\frac{1}{10}$ possibly 1 $\frac{2}{10}$

C1313

OK	Ckd Blank	Dis cracked V
Com OK	Edge	Com OK Edge
OK	X	OK
OK	V	OK
Com OK		X
Com OK Edge	Ckd Blank	OK
Dis Edge Vinear Crush	Edge Dis	
Dis. Edge Crush	OK	Ckd
OK X	OK	Ckd
OK	OK	Ckd
OK	OK	
OK X	Cracked Vein Dis	Ckd in place Edge
Dis OK	Cracked Edge	Dis Ckd
Dis OK	Com OK	Dis Ckd
		Dis Ckd
66% OK	58%	58%
Perfect 16%	8%	8%

Same - bad

1171 E Keeping Var blanks appears BAII

8 Rounds req 1522 B blanks Watmashed + Baked regular to be laid aside, 4 Rounds to be printed 36 hours after Baking + 4 Rounds after 72 hours.

OK	Edge	
Blank Crushed Dis Feed line	Vinear OK	
OK	Com OK Edge	
Vinear OK	OK	
OK	OK Vin	
Com OK Ckd	No OK feed lines	
Edge Crushed	OK	
Vinear Discard	OK	
" Discard	Vinear OK	
Vinear OK	OK	
Vinear OK Ckd	OK all around	
25% perfect none	Vinear Discard	
	Vinear Ckd 58% nonperf	

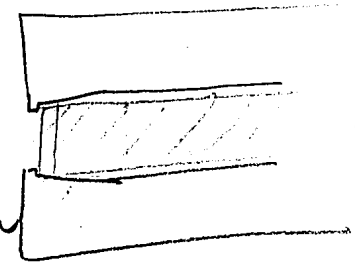
Redent test

Redent test

X perfect	1172 E	Blanks Not Edged	
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	Veneer OK	CK Dis CK
OK OK	X	?	CKd Blank
OK OK low	3	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK		Cracked blank	
OK OK	X	OK OK	X
OK OK	X	OK OK	X
		OK OK	X
100% perfect	83	75	75% perfect

1172 E

Hoffman

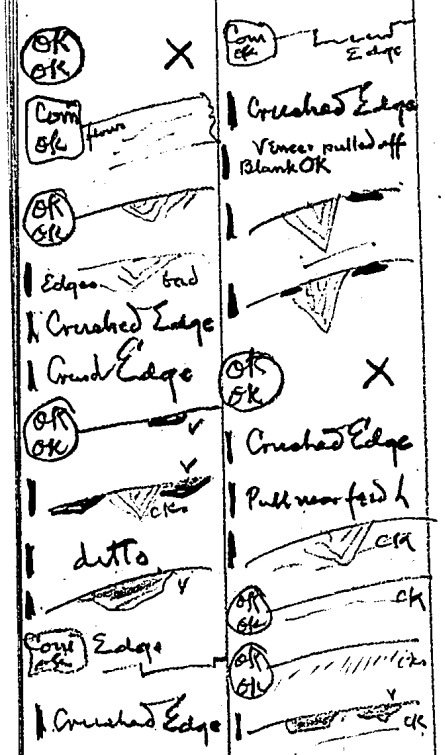


Make ~~2~~ 2 Rounds of blanks in The Knife Edge mould & tell Miller when ready

They swell a little generally 1/2 - + Extreme Edge 1/32 @ 1/64 Spalls off on some but places but Edge is OK up to Extreme edge of Varnish -

See further on for more rounds

1173 E



41%

8%

33%

8%

NOTE

Evidently a little more Stiffness dont Cure the Edge trouble

1173E

Hoffman –

Make another full batch like 1170 – But with 4 – 3 – + 1 or $\frac{2}{10}$th Lac instead of the Regular 1 Lac, ~~[illegible]~~

Make 4 rounds of blanks –

All are flowed round but do not go to or show the bevels –
The Center goes out Considerable but dont show space between Bevels tho Certainly plastic or yet Crushes

~~[illegible]~~ –

6-9-16 June 9 1916

Lot 1065 E Some of first 1522 Records
Edged cleaned & numbered —
Put up on time test over Case
in Music room
May 10 1916 -
Retested for surface
Apparently no Changes
in surface —

C14U

1174E 1st R		Pneu 32	
OK OK Cks	PO at feed line OK	Crushed Edge	
OK OK X	Edge Crushed	Veneer OK	
OK OK		Veneer OK Cks	
OK OK Cks		OK OK Cks	
OK OK Cks	Crushed Edge	Edge OK	
Ckd Blk	" "	Crushed Edge	
OK OK	" "	OK OK	Relief Level
Dis Edge -	OK OK	Crushed Edge	
OK OK	Crushed Edge	Com Left Edge	
Crushed Edge	OK OK	OK OK	
Pull out -	Dis	Crushed Edge	
OK OK		OK	
66 -	33%	33	
8%	none	none	

1174E

Hoffman

Make 4 Rounds of blanks 1522B from powder made with chaffee from 16 bbls + get even quality

5-10-16

After lot 157 all powder is dried at 150@160. 1 hour after reaching this in Vac Dryer -
also this is 8% lime chalk -

C145J

1172E

OK OK	X
Cracked Blk	
OK OK (Cks)	
OK OK	X
OK OK	X
OK OK	X
OK OK	X
PO OK at fold in Music Bad Varnishing	
OK OK	X
OK OK	X
OK OK (Cks)	
OK OK	X

83%
66%

9 days after — 1172

OK OK	X
OK OK	X
OK OK	
OK OK	X
OK OK (Mout Sound)	
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
Cracked Blank	

91%
75%

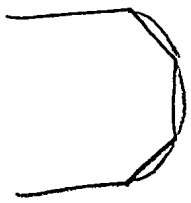
1172E Continued

Blank Ckd	
"	
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK (Crks)	
OK OK (Bit Edge, hard Ck Out + found Crack in Blank)	
Blank Ckd	
"	
"	

58%

41 ~~Perfect~~

Only two out of 12 floated to the bevels to distinct, They were matte + round Edges + semi round



The trouble here is Crked Blanks probably dont get heat Enough at Edges —

Notwithstanding DIS based on Blank it falls significant to 3 levels + significant between in addition in Blank

Continued 1172E Not Beveled

OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X

100%
83% perfect.
Blanks not Edged

OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X
OK OK	X

100%
100% perfect

Continued 1172E

CISU

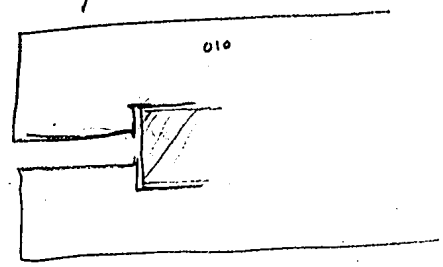
1175

OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	OK
OK OK	X	Com OK	Blank bad Edge
Edge 45°			
OK OK		OK OK	
OK OK	X	OK OK	X
Edge 45°		OK OK	
OK OK			
OK OK	X	OK OK	X
OK OK	X	OK OK	
OK OK	X	11	
OK OK	X		
16			
87.5		100%	
75% perfect		54%	

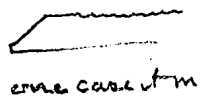
1175 E

Luhr to fix one part mould holders - without bevel

To be 10/1000 smaller than the blank



First one 6/13th 1916 - Came out perfect -

The cracked edge  seems to be due to bad edges, in one case it may be due to absence of lead pkg

5-10-16

Have just found out that our system of powder is wrong
We mix a new batch of powder
4-3-1 grind & screen
The stuff which dont go thru screen accumulates & is reground — Now this stuff is mostly fibre - to large, this gets ground up & its surfaces have very little shellac, The result is that if we start monday we get right proportions - perhaps
$3\frac{8}{10} - 4\frac{2}{10} + 1\frac{1}{4}$ tuesday —
$3\frac{7}{10}$ $4\frac{3}{10}$ | on wednesday
$3\frac{6}{10} - 4\frac{1}{2} + 9/10$ — —
& on thursday $3\frac{1}{2} - 4\frac{6}{10} + 8/10$
getting drier & drier
Chalk gets thru 1st, fibre last + fibre being ground finer + finer exposes more surface that has no shellac on

Note,

Have printed so far 3 prints one in a round using Varnished blank not baked just air dried only long enough so not sticky — Prints OK. Sounds OK, but blank Cracks just the same

Blanks must be too Dry wants more

Late — Later

1176E lot 163
P 39 L 13

OK OK ck	OK OK X Soft	Dis V-Edge	Dis
OK OK V		Edge	Dis V blank ck
OK OK V	OK OK	OK OK X	OK OK X
OK OK V	OK OK X	OK OK X	Com Edge+V
OK OK V	OK OK V	Edge V cks	OK OK V
OK OK Edge 4"		Com	Dis-
OK OK ck	OK OK Edge		OK OK ck
OK OK Edge 1"	Dis Veneer	OK OK X	OK OK ck
OK OK X	OK OK X	OK OK ck	Powder, V+bad Edge
Soft Burr V bell sides	Veneer-Blank bend	Edge + ck	" "
OK OK V	Com Edge	OK OK X	OK OK X
	Edge	Discard	Com OK ck
	OK OK X	OK OK ck down seam	
83	66	58	58
8%	33%	33%	16%

1176E — part that prints bowl in Very hard + ok opp where dent head bowl bad + Very soft.

Printed 4 Rounds - made of fresh powder no accumulation of scarcelled + screen ok

Regular NOTE

new powder no better than old powder we that too dry

Present Reg

always this crack where BAD + Cut off.

Cut + you find Cracks at this point

Some times Soft Hard

generally soft -

1177 Lot 14
Run 26

Blank Cracked

Crushed Edge

Veneer

Veneer

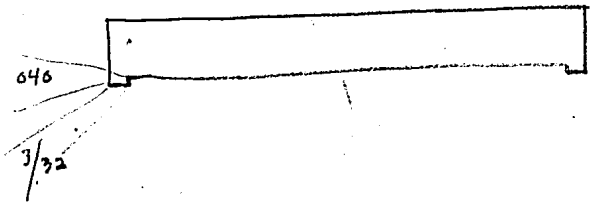
60%

more perfect

Cutout

1177 F

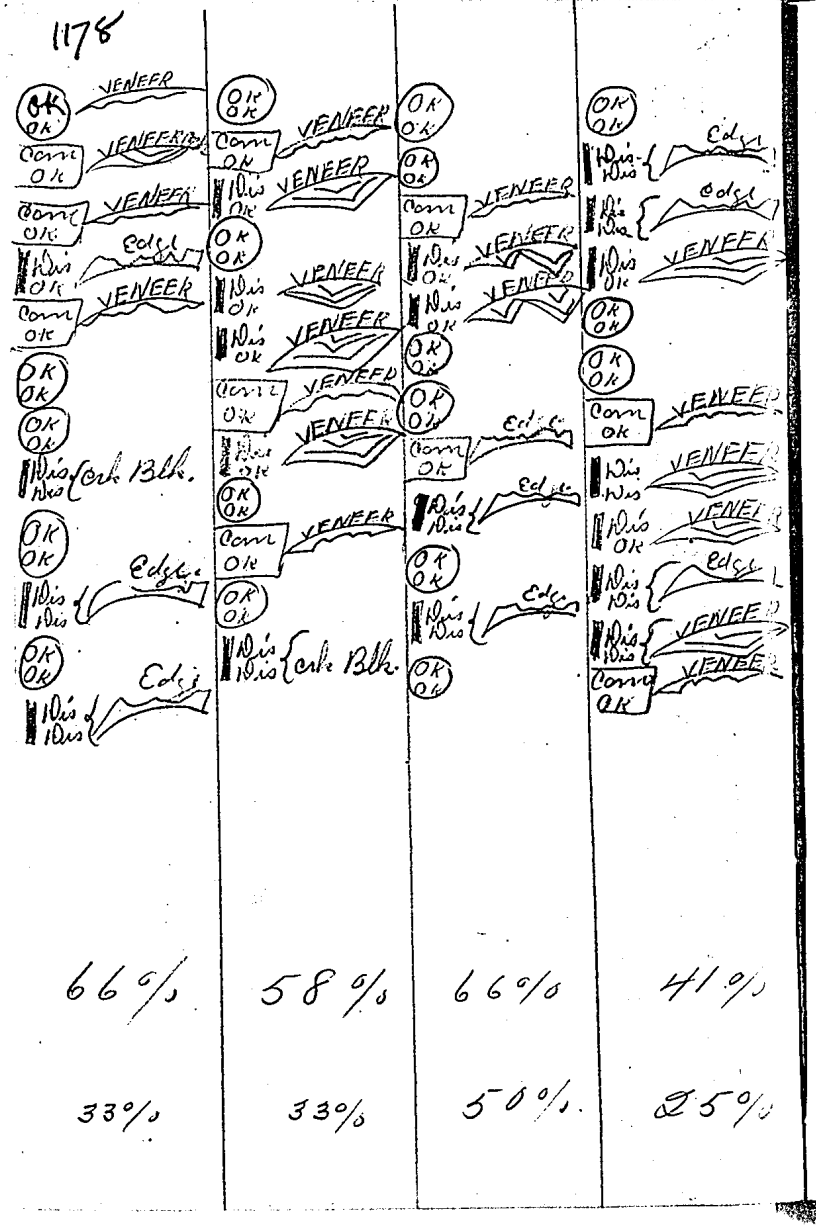
Blanks from new mould
ground by Luhr



2 Rounds

Thus ordinarily is NG

1178

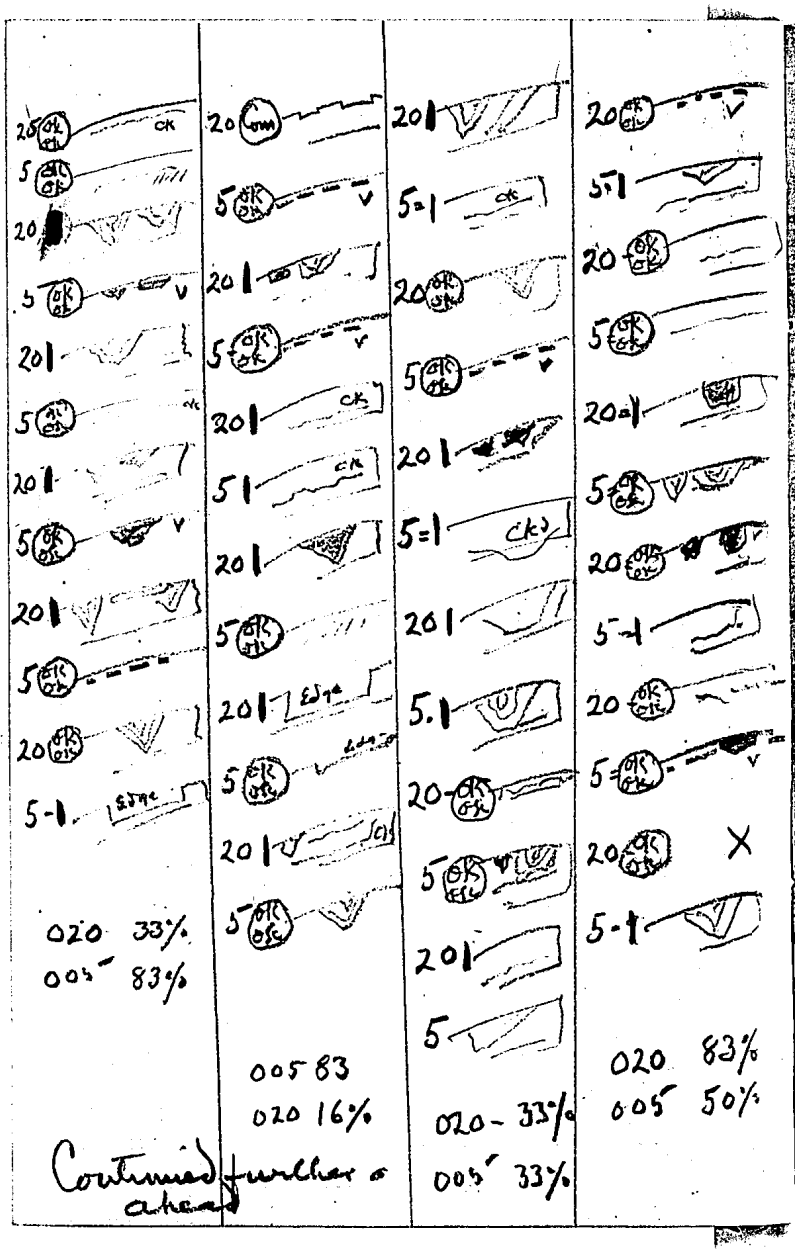


66%	58%	66%	41%
33%	33%	50%	25%

1178E

4 Rounds gauged within .010 of each

Print Reg



1179E 14 of 020 Bad
7 of 005 Bad

of all defects 020 23 defects
005 24 "
Apparently very little gain

48 Blanks - all varying .020 & over

and 48 blanks - within .005 ——

4 Rounds to be grinded One 005 then 020 then 005 — & so on so every alternate blank goes in a round

Lot 163

1180 -

Press 42 - load 28

OK OK ck	Com " Edge ck
OK OK ½ very rough	Com " Edge ck
OK OK ck	Com " Edge ck
OK OK X	Com " Edge
OK ck	Com " Edge ck
OK OK ck	Dis Edge
	6
Vemerick Dis Edge -	Dis Edge ✓
ck to Music ✓	
OK OK ck	OK OK ck
OK OK	OK OK ck
PO OK near feed	OK OK ck
OK OK ck all rounds	PO OK at feed
	OK OK ck
66	6
	75
8 of 8 perfect	no perfect

1180E

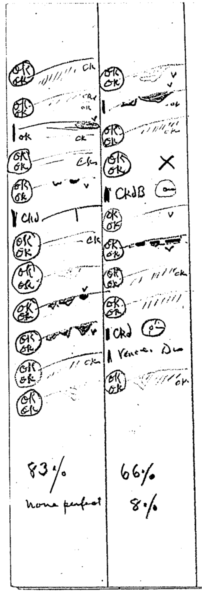
Print 6 Reg + 6 Dummies - That are solid - no blank inside -

6 Dummies solid metal on the bottom - Reg are at top

NOTE

This dont fix the bad Edges apparantly —

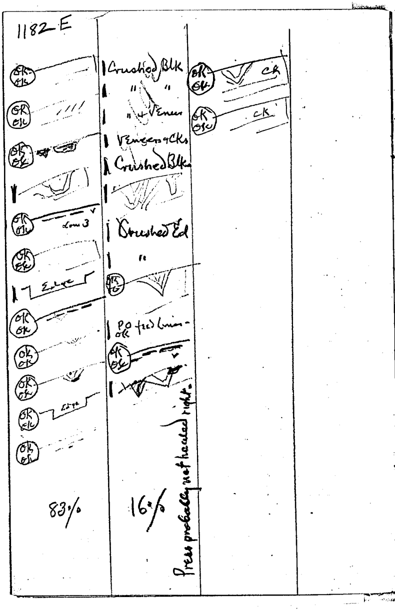
1181 E



Hoffman-

Put an $\frac{1}{8}$ thick - 3/8 wide ring of Rubber around outer rim of Rubber So as to get more powder & harder Edge,

Make 2 Rounds & Print



1182 E

2 Rounds

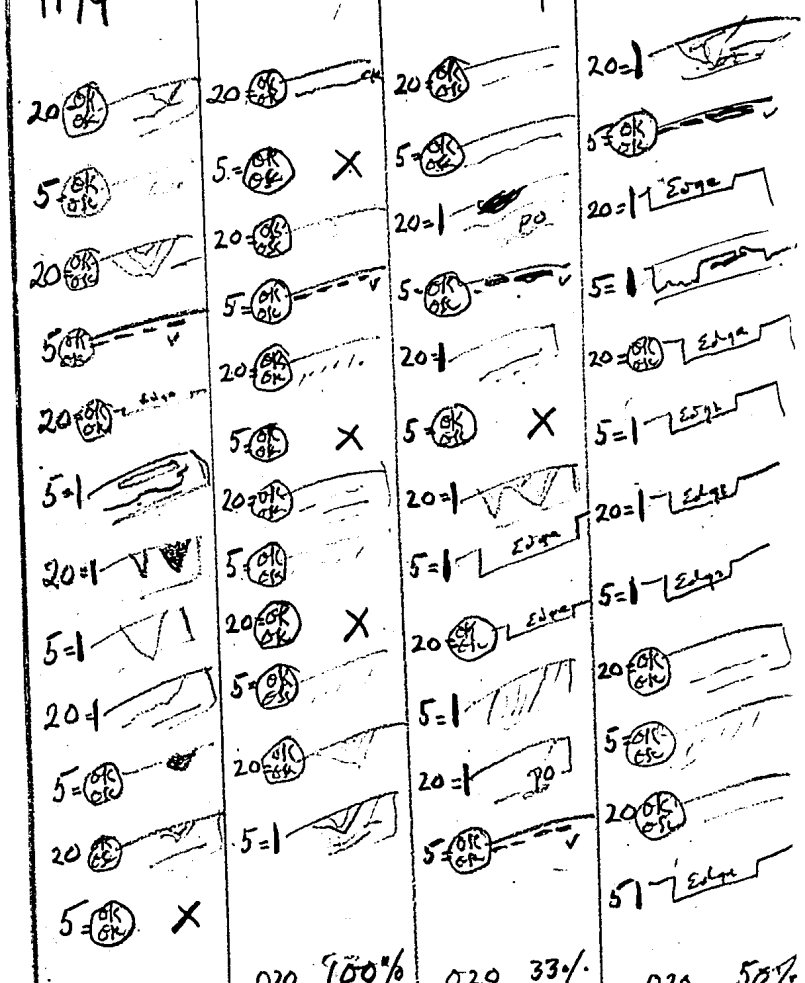
Blanks made with Extra ring to prevent big rubber plunger from flowing -

Print Reg

1 Round run -

011
8
4
8
6
8
8
6
7
8
7
.010

1179 Continued not Touching Bevels



1185

020 44 defects
005 43 defects -

020 18
005 9

Edge
020 7
005 7

Parallelles
005 8
020 15

020 7
005 6

020 - 1
005 10

Couch 020 25
" 005 30

Very little difference

About same as Regs
with 5%

1184 E

6-13-16

4 Rounds with Blanks
from new Carload of
Chalk
Paint Reg
It starts at 209 Lot
Sweepings 196 Lot,

C181

1185 E

1 Veneer Dis

1 " Dis

GR GK

1 Cracked blank

GR GK ×

GR GK

GR GK

GR GK Edge of Veneer

GR GK ×

1

GR GK ×

GR GK

66 2/3

16 2/3 perfect

1185 E

Hoffman Expt

Blanks, without Rubber

Pressures or Turn table

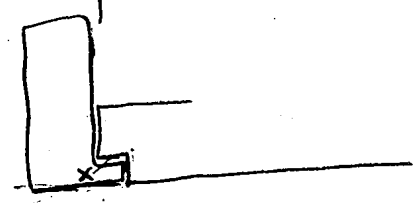
1186E

OK OK X	OK OK X	OK OK	OK OK X
OK OK Low 2	Cracked	OK OK	OK OK X
OK OK X	OK OK X	OK OK	OK OK Low 3
OK OK X	OK OK	OK OK	OK OK
OK OK X	OK OK Veneer	OK OK	OK OK X
OK OK X	OK OK	OK OK X	OK OK Low 2
Some OK VENEER	OK OK	OK OK	OK OK X
OK OK		OK OK Veneer	OK OK
OK OK X	OK OK	OK OK Low 3	OK OK Low 3
OK OK	OK OK	OK OK X	OK OK
OK OK X	OK OK	OK OK	OK OK
OK OK	OK OK X	OK OK	OK OK
	11		
100%	81%	100%	100%
58%	27%	16%	

1186_E

Hoffman

4 Rounds of blanks made with Clean moulds and bottom mould not touching ledge on outside ring



X not touching at X — + clean

Print Reg

1187-E

Hoffman

Make 2 or 3 blanks - Then, Bring to 600 LBs Cold, Then put on steam for 4 minutes

1 Top hard
bottom soft

2 2 MORE same but steam left on 6 min

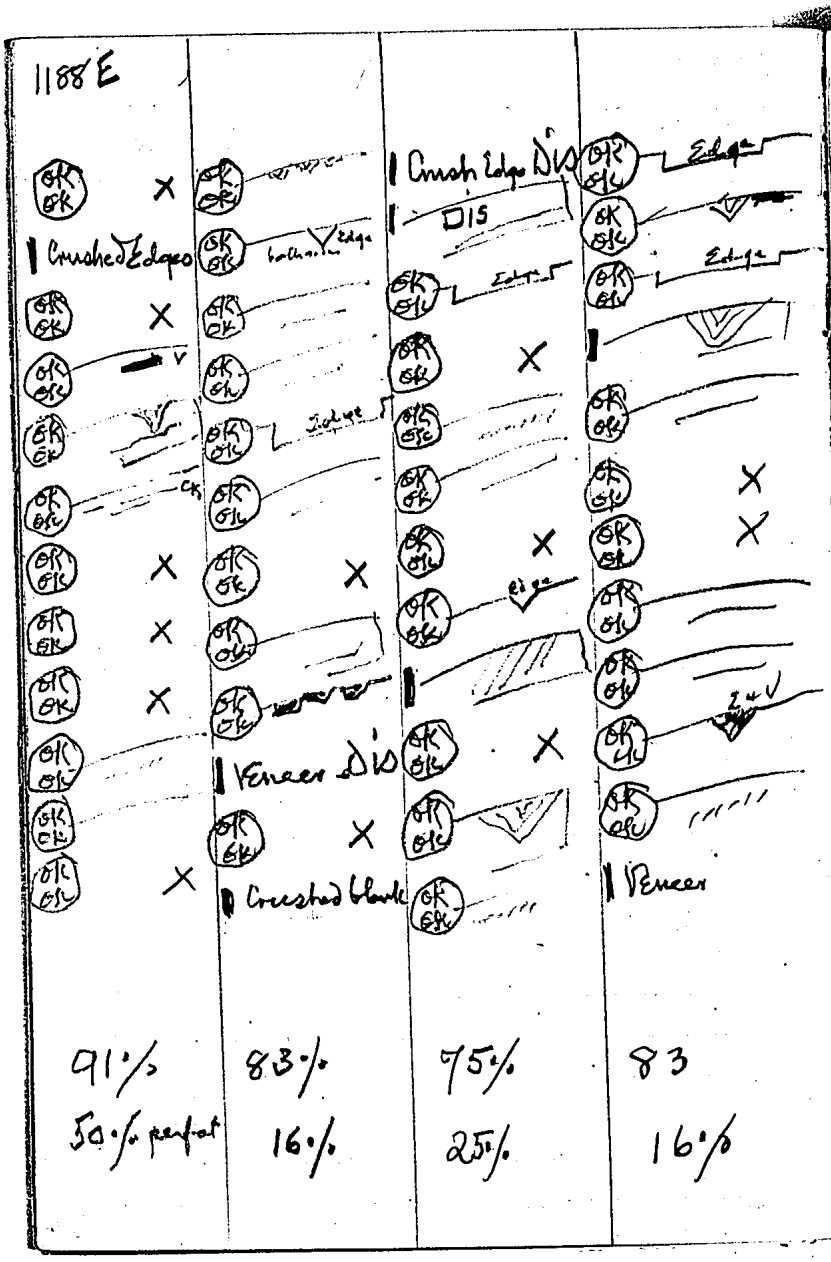
Top Hard
Bot soft

3 Dup the 4 min but dont use Rubber packer Hammer pieces

Top Hard
Bottom soft

These blanks are very much softer than 1 + 2

1188 E



91%	83%	75%	83
50% perfect	16%	25%	16%

1188 E

Hoffman

Make 4 Rounds Reg blanks but with clean Edges around bottom plate & bottom side of bottom plate cleaned of blank Material

Print Reg

There seems to be no improvement here but trouble is somewhere else, but this is good Teaching

(191)

Average Miller & Upstairs —

June 20 -	80.8 OK	43% Perfect
	84.8 OK	37.5 "
	89.5 OK	53
	83.7	51.4

June 1	1st	2nd	3rd
Leg 1	3015	2923	
2	1609	2188	
5	2265	2825	
6	2581	2591	

1508	5 — 2 — 1 1/3
1510	5 — 2 — 3/4
1522	4 — 3 — 1

average of Miller & Upshaw Inspector
60 Records —

	OK	Perfect
June 6	95	82
7	92	68.3
8	91	61.4
9	81.9	55.1
10	80.3	43.8
12	86	54
13	76.1	47.0
14	83	50.6
15	85.5	51.6

Final % To Baldwin -

May 28	75%
June 4	80.9
5	85.3
6	80.4
7	78.25
8	70.34
9	55.7
12	66.6%
13	51.5%
14	47.5
15	50.0

Output blanks - 1522 B

May 23	4780	
24	5003	
25	5223	
27	4223	
29	7685	
June 1	9470	
2	10527	
3	7218	Shortmen
5	8247	
6	9756	
7	11437	
8	12869	
9	14127	
10	8697	
12	12000	
13	12150	
14	11351	
19	9662	

See over

May 25	Total PB Moulds on hand	309
27		339
29		372
June 1		421
" 2		444
" 6		457
7		470
8		502
9		502
10		502
12		521
		521
		521

1522 B Records Received by Baldwin

June	1	2192	10th	4513
	2	1694	12	7065
	3	1268	13	7655
	5	5127	14	7215
	6	5237	15	5917
	7	6056	16	7132
	8	5504	19	6020
	9	7091	22	6247

Mould holders received Rec.

June	6	16	Holders received
	7	15	"
	9	21	"
	10	21	"
	12	20	"
	13	32	

[ITEM(S) FOUND IN BOOK]

6/27/1[illegible]

Dis. Road [illegible] in Muncie
" " P.O. [illegible]
" " P.O. [illegible]
" " " " " "
" " " " " "
" " Bad Venus
" " P.O. and Chico
" " " " in Muncie

[illegible] Duncan [illegible]
Roundtrip [illegible]

4.80
15
10
240
480
72